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DATA SHEET

PUSH FIT FITTING MADE IN PPSU

MATERIAL SPECIFICATION

PART	MATERIAL
Fitting Body	PPSU
O-Ring internal	EPDM rubber Peroxido70
Clamp	PPSU
Sleeve	PPSU
Bevel Ring	POM
Insert Brass (Male)	CW617N
Insert Brass (Female)	CW617N

Manufactured in conformity with the following international standards:

ISO 21003. Multilayer piping systems for hot and cold water installations inside buildings.

ISO 15875. Plastic piping systems for hot and cold water installations – cross linked polyethylene (PE-X).

ISO 22391.Plastics piping systems for hot and cold water installations — Polyethylene of raised temperature resistance (PE-RT)

UNIVERSAL PUSH FIT fittings not requiring mechanical tools.
Compatible with PEX and MULTILAYER pipes.
Green control check

Maximum temperature	140º C
Mínimum temperature	- 40º C
Maximum pressure at 95º C	- 10 bar
Maximum pressure at 23º C	- 100 bar

FIELDS OF APLICCATION

Plumbing
Heating
Air Compresser

Table 2 — Derivation of test pressure, p_F

	Application class			
	Class 1	Class 2	Class 4	Class 5
Maximum design temperature, T_{max} (°C)	80	80	70	90
Design pressure of the pipe construction, p_{CD} (MPa)	b	b	b	b
Test temperature, T_{test} (°C) [a]	95	95	80	95
Test duration, t (h)	1 000	1 000	1 000	1 000
Hydrostatic pressure of the pipe construction, p_C (MPa)	b	b	b	b
Test pressure, p_F (bar)				
for a design pressure, p_D, of: 4 bar	b	b	b	b
6 bar	b	b	b	b
8 bar	b	b	b	b
10 bar	b	b	b	b
Number of test pieces	3	3	3	3

NOTE 1 bar = 0,1 MPa.

[a] Generally, the highest test temperature is taken to be (T_{max} + 10) °C, with an upper limit of 95 °C. However, to suit existing test facilities, the highest test temperature for classes 1 and 2 is also specified as 95 °C. The hydrostatic stresses given correspond to the given test temperatures.

[b] The values of p_{CD}, p_C and p_F result from the long-term strength data for the individual construction.

Table 5 — Test parameters for thermal cycling

	Application class			
	Class 1	Class 2	Class 4	Class 5
Maximum design temperature, T_{max} (°C)	80	80	70	90
Highest test temperature (°C)	90	90	80	95
Lowest test temperature (°C)	20	20	20	20
Test pressure (bar) [a]	p_D	p_D	p_D	p_D
Number of cycles for $D \leq 63$ mm [b]	5 000	5 000	5 000	5 000
Number of cycles for $D > 63$ mm [c]	2 500	2 500	2 500	2 500
Number of test pieces	One set of fittings with the configuration shown in EN 12293			

NOTE 1 bar = 0,1 MPa.

[a] p_D is the design pressure of 4 bar, 6 bar, 8 bar or 10 bar, as applicable.

[b] Each cycle shall comprise 15 min at the highest test temperature and 15 min at the lowest (i.e. the duration of one cycle is 30 min).

[c] Each cycle shall comprise 30 min at the highest test temperature and 30 min at the lowest (i.e. the duration of one cycle is 60 min).

Table A.1 — List of reference product standards

Material	Reference product standard
PB	ISO 15876-1, ISO 15876-2, ISO 15876-3, ISO 15876-5
PE-RT	ISO 22391-1, ISO 22391-2, ISO 22391-3, ISO 22391-5
PE-X	ISO 15875-1, ISO 15875-2, ISO 15875-3, ISO 15875-5
PP	ISO 15874-1, ISO 15874-2, ISO 15874-3, ISO 15874-5
PVC-C	ISO 15877-1, ISO 15877-2, ISO 15877-3, ISO 15877-5

Table 7 — Test parameters for leaktightness under vacuum

Test temperature	23 °C
Number of test pieces	3
Test pressure	– 0,8 bar
Test duration	1 h

NOTE 1 bar = 0,1 MPa.

Table 6 — Test parameters for pressure cycling

Test temperature	23 °C	
Number of test pieces	3	
Frequency of pressure cycling	(30 ± 5) cycles per minute	
Number of cycles	10 000	
Test pressure limits for a design pressure of:	Upper limit	Lower limit
4 bar	6,0 bar	0,5 bar
6 bar	9,0 bar	0,5 bar
8 bar	12,0 bar	0,5 bar
10 bar	15,0 bar	0,5 bar

NOTE 1 bar = 0,1 MPa.